

PATENT
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of)

Stallman et al.)

Appl. No.: 09/505,678)

Filed: February 17, 2000)

For: INFANTRY WEARABLE)
COMPUTER AND WEAPON)
SYSTEM)

Examiner: C. Sadaat

Group Art Unit: 3713

Atty. Dkt. No.: 2135.650

Commissioner for Patents
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Sir:

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APPENDIX
(ALL PENDING CLAIMS ON APPEAL)

39. A portable, wearable, information apparatus for collecting, coordinating, and communicating information, said system being capable of providing real-time situational awareness in armed conflict conditions, said system comprising:

a power supply;

a computer for controlling functions of said apparatus;

a software interface for interacting with said computer;

a display for displaying information processed by said computer;

a weapon communicably connected to said computer, and having a trigger for firing said weapon;

said weapon having a grip for handling said weapon, said grip located adjacent said trigger; and said weapon

having a barrel including a bore, said bore having an axis extending longitudinally therethrough;

wherein said software interface is controlled by a weapon mounted cursor control device, said weapon cursor control device comprising:

a control mechanism for positioning a cursor, said control mechanism being so located on a rear facing portion of said grip such that both a right and left handed user can access said control mechanism employing a thumb while maintaining contact with said trigger with a finger; and

an actuating mechanism for performing control, selection, and action functions on said software interface.

40. The apparatus according to claim 39 wherein said weapon mounted cursor control device is communicably connected to a first software interface embodied in a computer readable medium, said first software interface providing a click-and-carry method of cursor control and including a cursor and graphical icons, said click-and-carry method comprising in sequence:

orienting said cursor at a first location proximal a graphical icon displayed on said user interface;

depressing said actuating mechanism to select said graphical icon;

releasing said actuating mechanism;

orienting said cursor at a second location physically separate from said first location;

depressing said actuating mechanism to release said graphical icon at said second location.

41. The apparatus according to claim 39 further including a second software interface comprising:

at least one pull-down menu containing words being alternately descriptive of combat scenarios and directives;

a message window for receiving and displaying words selected from said pull-down menu;

means for selectively transmitting a message contained in said message window.

42. The apparatus according to claim 40 wherein said control mechanism comprises a joystick for access by a thumb of a user.

43. A portable, wearable, information apparatus for collecting, coordinating, and communicating information, said system being capable of providing real-time situational awareness in armed conflict conditions, said system comprising:

an input/output device for interfacing said computer with components of said system, said components including:

a display for displaying information processed by said computer;

a voiceless, wireless communication means; and

a user position location device;

a power supply;

a computer for controlling functions of said apparatus and having a software interface for interacting with said computer;

wherein said apparatus further includes a weapon communicably connected to said computer, and having a trigger for firing said weapon,

said weapon having a grip for handling said weapon, said grip located adjacent said trigger; and said weapon

having a barrel including a bore, said bore having an axis extending longitudinally therethrough;

wherein said software interface is controlled by a weapon mounted cursor control device, said weapon cursor control device comprising:

a control mechanism for positioning a cursor, said control mechanism being so located on a rear facing portion of said grip such that both a right and left handed user can access said control mechanism employing a thumb while maintaining contact with said trigger with a finger; and

an actuating mechanism for performing control, selection, and action functions on said software interface;

wherein said input/output device comprises:

voltage converters for converting power provided by a power source to voltages compatible with said components of said system, said voltage converters thereafter being capable of transmitting said converted power to said components; and

data relays for routing data between said computer and said components thereby permitting said components and said computer to communicate;

a plurality of universal, plug-in, plug-out connectors for receiving universal connectors of said components, said universal, plug-in, plug-out connectors further providing means for quickly removing a said component and thereafter replacing said component with a new component, wherein said new component connects to said input/output device via a universal connector.

44. The apparatus according to claim 43 wherein said weapon mounted cursor control device is communicably connected to a first software interface embodied in a

computer readable medium, said first software interface providing a click-and-carry method of cursor control and including a cursor and graphical icons, said click-and-carry method comprising in sequence:

- orienting said cursor at a first location proximal a graphical icon displayed on said user interface;

- depressing said actuating mechanism to select said graphical icon;

- releasing said actuating mechanism;

- orienting said cursor at a second location physically separate from said first location;

- depressing said actuating mechanism to release said graphical icon at said second location.

45. The apparatus according to claim 44 further including a second software interface comprising:

- at least one pull-down menu containing words being alternately descriptive of combat scenarios and directives;

- a message window for receiving and displaying words selected from said pull-down menu;

- means for selectively transmitting a message contained in said message window.

46. The apparatus according to claim 45 wherein said control mechanism comprises a joystick for access by a thumb of a user therefore enabling the user to maintain a finger on said trigger while operating said joystick.

49. The apparatus according to claim 41 wherein said words which are contained in said pull-down menu may be input by a user.

50. The apparatus according to claim 43 wherein said input/output device further includes digital/analog data converting means.

51. The apparatus according to claim 50 wherein said input/output device further includes video format converting means.